

CLAIMS

What is claimed is:

1. A method for securely switching between operating modes of an industrial controller for machine tools or production machines, comprising the steps of:

identifying an operator before switching between the operating modes;

transmitting to an operator's console of the controller a redundant binary enable signal in the event of a successful identification of the operator; and

if the operator's console receives the enable signal and determines that the enable signal is error-free, enabling the operator to switch between the operating modes by using at least one key of the operator's console, with the least one key being implemented in safe technology.

2. A device for securely switching between operating modes of an industrial controller for machine tools or production machines, comprising:

identification means for identifying an operator before switching between the operating modes;

an operator's console of the controller receiving from the identification means a redundant binary enable signal if the operator is successfully identified; and

at least one key located on the operator's console and implemented in safe technology, wherein the at least one key enables the operator to switch between the operating modes if the operator's console receives from the

identification means the enable signal and determines that the enable signal is error-free.

3. The device of claim 2, wherein the identification means are externally connected to the operator's console.
4. The device of claim 2, wherein the identification means comprises a key authentication switch and a key operating the key authentication switch.
5. The device of claim 4, wherein the key authentication switch comprises a two-step key authentication switch.
6. The device of claim 4, wherein the key authentication switch is configured so that the key operating the key authentication switch, when released, automatically returns to its initial position and interrupts the enable signal.
7. The device of claim 5, wherein the identification means is selected from the group consisting of an identification card, a transponder and a biometric device.
8. The device of claim 7, wherein the biometric device comprises a fingerprint scanner or a retina scanner.